USER MANUAL GO-KART

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1.0 Introduction

Congratulations on your choosing a Berg Toys go-kart!
Berg Toys does everything to design and manufacture a robust and safe product. You can now call yourself the proud owner of a product which you will be able to enjoy for years to come.

Through the years the Berg go-kart has undergone many changes. Better materials were used to achieve a better design of for instance seat, wheel and wings. Also installation options for lights and locks are now available.
Partly due to the innovations to the developments of the products, Berg Toys received the *'most innovative company breaking new ground'* award in 1999 from the City of Ede, The Netherlands.

The BERG go-kart is intended for long life, but it will need some maintenance work from time to time.
Maintenance will ensure a sturdy toy for many years. This user's guide contains instructions for maintenance. Most of the maintenance work on the go-kart can be carried out by the owner.
For large repairs you should see your Berg Toys dealer, the place where the knowledge and the appropriate tools are available.

Fig. 1: Berg Toys BV

Visit our home page www.bergtoys.nl to read all about Berg Toys and see photos of the products. You can also mail your experiences with Berg Toys and the Berg Toys products to info@bergtoys.nl. Do not hesitate to send us your suggestions for improvements and other experiences.

2.0 Technical Details

Width:	75-82	cm
Length:	125-165	cm
Height:	80-100	cm
Empty weight:	32-60	kg
Carrying capacity:	140	kg
Max. trailer weight:	75	kg
Tyre pressure (at 15°C, front and rear):	1,2 -1,5	bar

Easily adjustable seat
Steering-rack in plastic bearings
Tough enamel paintwork
Handbrake on both rear wheels with integrated parking brake
Self-locking draw-hook
All big wheels with ball-bearings
Plastic mudguards with reflectors
Completely enclosed chainguard
Pedals with bearings
Front swivel suspension
BERG Complete AF
(with passenger seat deluxe)
Original Dutch quality
Five years warranty on the frame
Powdercoating finishing
All spare parts are available
Safety standards according CE and TÜV

Fig. 2: Technical details

Due to constant development we reserve the right to change the above technical data without prior notification.

3.0 Guidelines for safe use

- Before using the go-kart, check if everything functions properly.
- Children may only drive the go-kart when supervised.
- A BERG go-kart is not allowed on public roads. Always drive it at appropriate speed, depending on the situation. Driving down a slope slantwise, the go-kart may overturn. Downhill a considerable speed may be achieved, resulting in a longer break path.
- Sharp bends at high speed also may cause the go-kart to overturn.
- Always pay attention to the environment.
- Do not reverse at high speed. You may lose control of the wheel. The front wheels may become detached from the ground when braking while reversing at high speed.
- Do not drive under the influence of alcohol or drugs which have a negative effect on your perception or reaction.
- Bumping and other stunts are damaging to the go-kart. Berg Toys can not be held liable for damage thus inflicted.
- Do not pedal backwards in an automatic freewheel (AF) when you are driving forward and vice versa. Do not pedal forward in a brake freewheel (BF) or -3/-7 accelerator hub (BF -3/-7)when driving backward. The gear may take over the pedals.
- For braking always use the hand brake regardless of the type of go-kart. The hand brake always works on two wheels, the break freewheel (BF) and the -3/-7 accelerator hub only work on one wheel.
- Do not place unnecessary objects on or over the brake handle or the wheel. Make sure that brake and wheel can always function properly.
- Clothes and limbs may get stuck in revolving or hinged parts. Avoid loose attire such as scarves or shoe laces. It can cause accidents.
- Avoid contact with the wheels when driving the go-kart.
- The brochure contains guidelines on age categories. The owner/driver is responsible for deciding whether The BERG go-kart is age appropriate.
- Make sure that for every drive the driver's seat is in the right position with regard to the pedals to allow for safe driving (picture 3).
- Do not get on or off while driving.
- Do not overload the vehicle.
- Do not drive in the dark without lights..
- Protective covers having been removed for maintenance purposes should always be put back in the original state before use.
- When parking the vehicle, always put it in brake with the lock
  brake.

4.0 Maintenance

4.1 Frame

The frame is powder coated. This creates a hard coating. To prevent corrosion it is important to regularly clean the frame. Should you want to grease the frame for the purpose of conservation, only use acid-free vaseline. Minor damage may be restored with some paint. The right varnish may be obtained from your dealer.

4.2 Wheels/Tyres

Wheels may have either needle bearings (picture 4a) or ball bearings (picture 4b). Needle bearings should be cleaned and lubricated once a year to make the wheels run smoothly.
Regularly check the wheel rims and tyres for damage (cuts, tears, bumps) Attention: damage to rims and tyres may cause accidents!

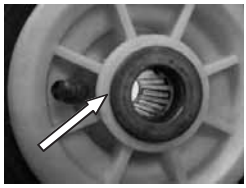

Fig. 4a

Tyre pressure should be 1 bar at least and 1.5 bar max. (Remember pressure increases at high temperatures). At the right pressure, the go-kart runs smoothly and lightly.
If there is not enough pressure the tyres tend to get punctured more easily and excessive wear and tear occurs.
If there is too much pressure the tyre can come loose. This may lead to dangerous situations. (Be aware that pressure increases under high temperatures and in blazing sun!)
Tyres should not get into contact with oil, grease or fuel.
Make sure the valve caps are always on.

Fig. 4b

4.3 Steerage

Steerage should regularly be greased for it to run smoothly.
For the adjustable wheel it is important that the identifying mark on the side of the inner control tube is not visible. I f it is visible, the inner control tube should be pushed back (picture 5a).
Steerage of every BERG go-kart needs to be checked once a month for the following:

- breaking and/or damage of all parts of the steerage
- controls (lubricate all rotation points)
- alignment front wheels (see pictures next page) for models with double ball steerage
- stuck bolts

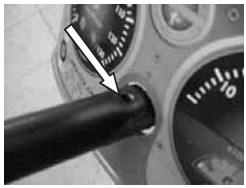

Fig. 5a

4.3.1 Alignment front for models with double ball steerage

Fig. 5b

1-Check if bottom of strip is in upright position.

2-Then check the smallest deflection of the left and right wheel with the front bumper (As indicated in the picture at the bottom of the page).

Fig. 5c

Fig. 5d

Fig. 5e

3-Loosen the steering swivel at the side of the wheel with the smallest deflection (see 2). In this example it is the left wheel (13 and 19 spanner).
Then push against the wheel in the direction away from the bumper (see indicator in the top left of the picture). After that, tighten the steering swivel well.

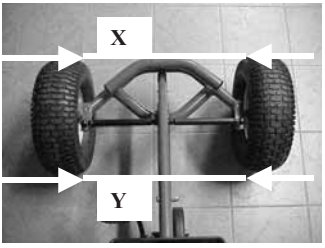

Fig. 5f

4.4 Driving gear

4.4.1 Chain

The chain needs to be greased regularly in order to have it run smoothly. It should only be possible to push in the chain 2 to 3 cm in the middle. Make sure the rear axle does not move when the chain is pushed in in the middle.
If the chain is pulled too tight, the go-cart will peddle heavily and the axle could break. If the chain is not tight enough, the chain guard may be damaged. Tightening the chain for models with a square frame is carried out as follows (see picture 6a):

Loosen the bolt (A) a little, push the crankshaft forward and tighten the bolt again.
ATTENTION: the chain (B) may NOT be TOO TIGHT. Remove the upper half of the chain guard to check this. The chain should be easy to push in in the middle some 3 cm. Pushed in 1cm, the rear axle should nor bend at all!
Tightening the chain for models with an oversized round tube frame is carried out as is described below.

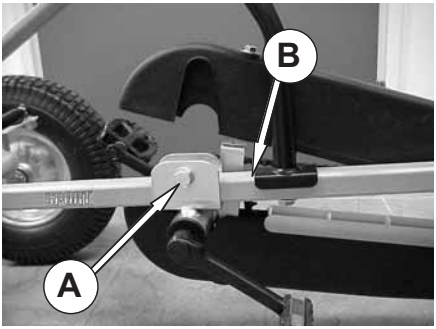

Fig. 6a

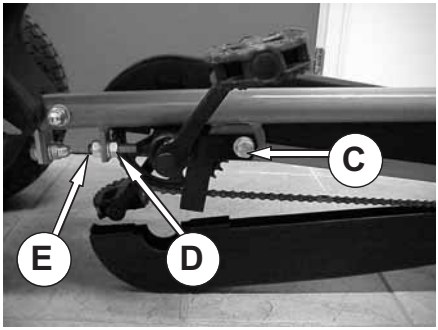

Fig. 6b

To tighten the front chain (see also picture 6b):
Loosen bolt C and bolt D a little and tighten the chain with bolt E. Tighten C and D again.
ATTENTION: the chain may NOT be TOO TIGHT. Remove the lower half of the chain guard to check this. The chain should be easy to push in in the middle for about 3 cm.

The BF -7 model also has a second chain. This back chain is tightened as follows:
Remove the protective plate from the back hood. Make sure the hub remains exactly parallel to the rear axle (maximum 1 mm difference in distance between rear axle and the small axle of the brake hub left and right), as can be seen in the picture below (picture 7a). It should be possible to push in the chain in the middle with the thumb for about 3-4 mm. After this the front chain is tightened.

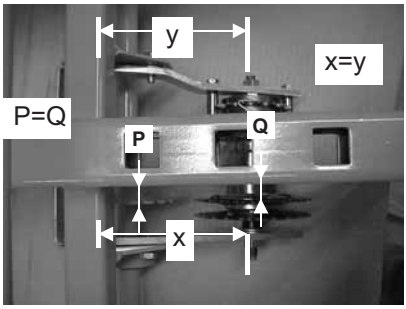

Fig. 7a

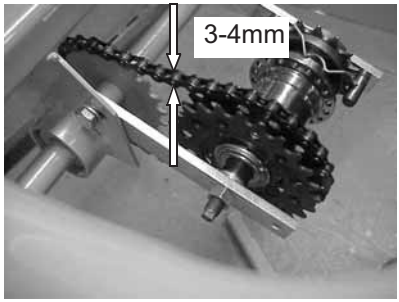

Fig. 7b

4.4.2 Crank assembly, when running in a new go-kart

After a period of use of a few days (of intensive use) to two weeks (normal use) the fixing bolts (see Fig. 8) with which the left and right cranks are mounted, have to be tightened again. Make sure that this is done 'hand-tight', i.e. with a maximum torque of 30 Nm. You can also turn to your dealer. He will be pleased to do this for you. (It is a normal effect that after a short period of use, under the influence of pressure on the pedals, the crank assembly will set itself. An additional effect is that play can arise, which consequently can lead to damage of the crank and the crankshaft. This play can be taken away by further tightening the bolts).

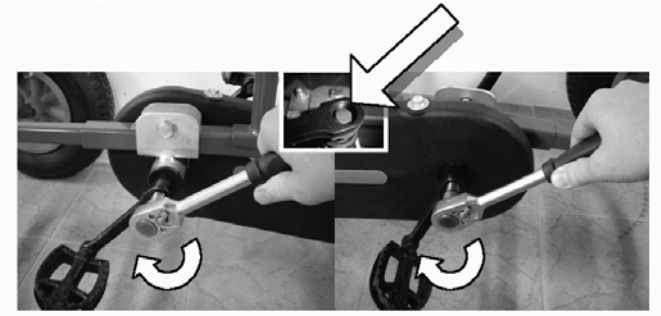

Fig. 8

4.4.3 Different types of freewheel

Different types of freewheel are available.
Check which type of freewheel your go-kart has, then follow the advice accordingly.

Fig. 9

- Freewheel (F)

This Freewheel allows you to only drive forward. The Freewheel needs no maintenance (Fig. 9).

- Automatic Freewheel (AF)

The automatic freewheel causes the pedals to stop when you do not move your feet. The automatic freewheel also allows you to drive in reverse.

Fig. 10

If the automatic Freewheel does not function at all it can be taken off the frame. After that the black plastic cover can be taken off. The inside can be cleaned with water. Make sure the inside is really dry after cleaning (for instance by using a hairdryer) in order to prevent corrosion. After this the inside should be lubricated **lightly** (preferably with a silicone spray). The black cover can now be put back on again. Make sure the rubber ring is greased lightly (for instance with vaseline) before the freewheel is mounted to the frame. Attention: too much grease is bad for the automatic freewheel.
After mounting, check if the freewheel is functioning properly before using the BERG go-kart. This is done by rotating the pedals backward and forward. In both cases the rear wheel should be driven. Make sure that when changing from forwards to backwards the wheel should have come to a full stop in between. The wheel nut needs to be well tightened.

- Shiftable freewheel (SF)

The shiftable freewheel operates basically like the AF. The SF can only be operated in conjunction with the brake handle. For explanation, see the pictures below.
For maintenance, see the AF. (Fig. 11)

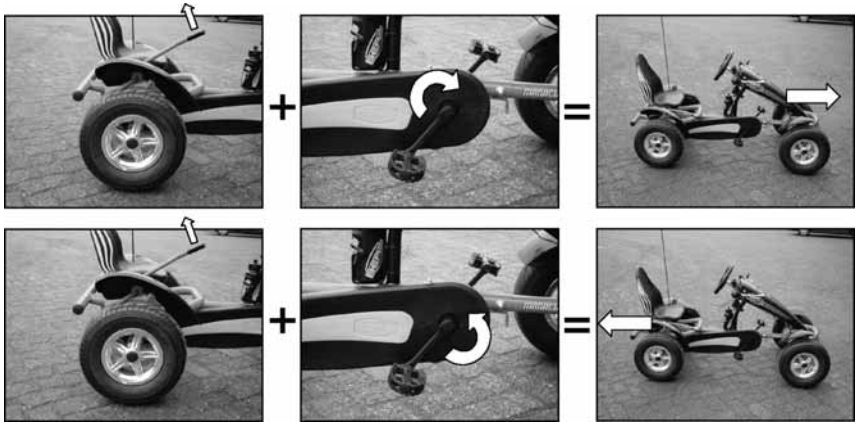

Fig. 11

- Brake Freewheel BF

The brake freewheel works like a back-pedalling brake and has a neutral. The brake freewheel can be put in reverse.
Depending on the frequency with which the BERG go-kart with freewheel (Fig. 12) is used the two chains need to be checked every six months for being well tightened (see section 4.4.1).

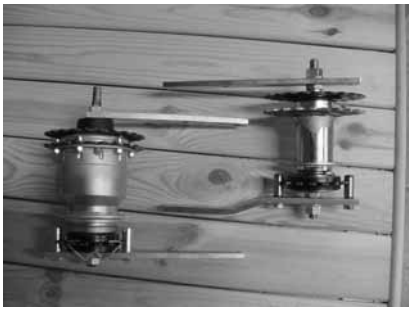

Fig. 12

- Brake Freewheel BF-7

If your go-kart is equipped with a BF-7 transmission hub, the gears will need to be adjusted at least every six months. The adjusting procedure is as follows:
When removing the rear cover you see the click box on the transmission hub. If you loosen the knurled head screw E, the click box can be removed from the axle. Both of the pins and the plastic clip stay on the hub. Put the rotary switch in 4th gear. The arrows in F should be pointing towards each other now. If this is not the case: turn screw G. For other problems consult your dealer. (Fig. 13)

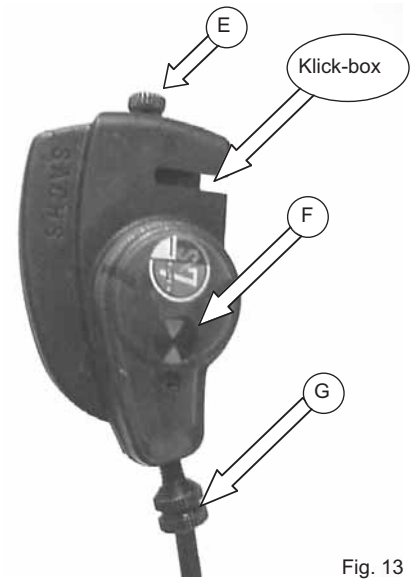

Fig. 13

- Brake Freewheel BF-3

If your go-kart is equipped with a BF-3 gear hub, the gears should be tuned at least every six months. This is done in the following way:

Remove the back hood to see the little black box at the end of the cable. (Fig. 14) With this box the cable length can be adjusted. With the switch on 3 (Fig. 15) the box should have about 2 mm lateral backlash. Check if the outside cable is far enough into the bushes at both ends and whether there are no kinks in the cable. In order to tighten the cable (for example because first gear is not working) the end of the chain is pushed further into the box. In order to loosen the cable (for example because third gear is not working) the lip at the end of the box is pushed in.

Fig. 14

Fig. 15

4.5 Plastic Parts

The plastic parts will have to be checked regularly for damage and breaking.
If breaking occurs, the specific part should be replaced immediately by an original part in order to guarantee the safety of the user.

4.6 Lubrication

Some Berg go-carts are equipped with grease nipples on the stub axle bushes. It is recommended to grease the stub axles 1 to 2 times per year. (Fig. 16)

Fig. 16

4.7 Adjusting the shock absorbers.

Shock absorbers are easily adjustable. Dependent on the weight of the driver and the desired comfortability is it possible to adjust the springs.
Standing behind the go-cart, is it possible to make the spring action more rigid by turning the springs clockwise.
Otherwise, you can make the spring action more softly by turning the springs counter clockwise. (Fig. 17a and 17b)

Fig. 17a

Fig. 17b

4.8 Maintenance and adjustment of the disc brakes.

If the brake handle due to wear needs to be squeezed further in order to operate properly, you need to adjust the brakes.
The cable connector where the brake cables are connected, is equipped with adjusting screws. By turning the adjusting screws counter clockwise, the free movement of the brake handle decreases and the disc brakes will perform better. (Fig. 18)
When the adjusting screws are entirely unscrewed and the free movement of the brake handle is still too much, you need to replace the brake blocks.
Ask your Berg Toys dealer for more information.

Fig. 18

When the brake disc runs out of true, you need to adjust the brake caliper.
By turning the adjusting screw (see picture), you can move the brake caliper sideward. (Fig. 19)

Fig. 19

5.0 Safety

The BERG go-kart is a toy and has the European CE hallmark. Each year an independent institution checks if the Berg products meet the required standards.
Berg go-karts are part of the toys product group. This means that the Berg go-karts are not allowed on public roads.
Children (under the age of twelve) should drive the go-kart only when supervised by an adult.

5.1 Brakes

Every BERG go-kart has a handbrake plus parking brake. Only the Berg Mickey has a handbrake without a parking brake.
For all go-karts goes that braking is done by moving the brake handle upward, on the right side of the seat.
This handbrake brakes the rear wheels (Fig. 20a).

Fig. 20a

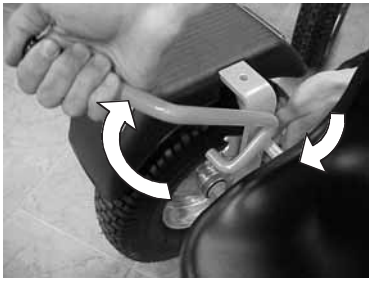

Fig. 20b

The parking brake is used by moving the brake handle upward and by placing the metal blocking strip underneath (Fig. 20b).
When getting off the go-kart, always put it on the handbrake.

The models with BF/BF-3/-7 also have a brake freewheel. This brake is used by back-pedalling. That way 1 wheel, the left hand wheel, brakes.
Check before driving whether tyre pressure meets the safety standards (min. 1 bar, max. 1.5 bar). It effects the working of the brakes.

5.2 Wheel

Check before driving if there are any defects on the controls and/or whether the steering is smooth. If this is not the case, you need to solve this first. For instructions see under maintenance.

5.3 Accessories

Only original Berg accessories should be used. Consult the berg dealer for advice on how to best put them in.

6.0 Accessories for go-karts

Installing accessories in the BERG go-karts effects the safety.
Extra information on the following accessories:

6.1 Pillion seat

The pillion seat is an accessory that can be mounted on the go-kart. Make sure the weight limits indicated are adhered to carefully.

Berg Mickey:	not allowed.
Berg Donald:	max. 25 kg.
All other go-karts:	max. 30 kg.

Exceeding these limits may cause the go-kart to swing back.
When ***getting*** on the passenger should get on ***last.***
When ***getting off*** the passenger should get off ***first.***

6.2 Trailers

If the Berg go-karts rides with a trailer, remember that the brake path is longer.
The trailers of Berg toys are not allowed behind a go-kart on slopes with a large gradient.
The maximum weight of the trailer depends on the weight of the driver. As a rule this is 70 % of the weight of the driver.
The maximum load for the trailer is the weight of the driver plus 30 kg, with a maximum of 60 kg.
Exceeding this limit may cause the go-kart to swing back, besides its having too long a brake path and getting out of control.

6.3 Roll bar (Fig. 21)

Make sure nobody hangs on the roll bar, which may cause the go-kart to swing back. The roll bar needs to be mounted correctly according to mounting instructions. These mounting instructions are wrapped with the roll bar.
By mounting the roll bar the seat position of the passenger becomes restricted and the baggage box is no longer mountable.

Fig. 21

Berg Toys cannot be held liable for any incomplete information in this user's guide.
Always take the highest possible safety precautions for yourself.
Please contact your dealer if you have any questions or doubts.

7.0 Maintenance schedule

Description	Daily	Every month	Every 6 months	Every year
Frame Clean and check all nuts and bolts		X		
Wheels/Tyres Check for damage and tyre pressure (between 1 and 1.5 bar)	X			
Steerage Check all bolts Check for damage/wear Lubricate	X			
Driving Gear Check chains for tightness		X		
Freewheel Clean and grease. Check for damage			X	
Plastic Parts Clean and check for damage				X
Hubs BF / BF-3 / BF-7			X	
Stub axle bushes Lubricate by means of grease nipples			X	

8.0 Warranty

1. The owner of this BERG Toys product has the following warranty conditions on this product.
   - frame: 5 years after date of purchase.
   - all other parts: 2 years after date of purchase.
   - parts subject to wear and tear (such as chain and tyres): no warranty.

2. The warranty only covers material or construction defects with regard to this product or parts of the product.

3. The warranty expires in the following situations:
   - incorrect and/or careless use of this product and use not according to the intended purpose.
   - the product was not assembled and serviced according to the construction manual.
   - technical repairs to the product have not been carried out professionally.
   - parts mounted afterwards do not meet technical specifications of the product involved or have not been mounted correctly.
   - defects as a result of climatological factors, such as corrosion or normal ageing of the varnish.
   - the product is in use as a rental or is in another way available to several persons unspecified.

4. BERG Toys is explicitly not liable for damage to (parts of) the product as a result of:
   - incorrect tune-up of driving mechanism, incorrect tyre pressure, incorrect adjustment of wheel, chain and hubs.
   - parts, such as chain and tyres, not replaced in time.

5. In the warranty period all material or construction defects as determined by BERG Toys will either be repaired or replaced, liberty of BERG Toys.

6. The owner of this product can only make a warranty claim by offering the product for inspection to a BERG Toys dealer.
   The original warranty certificate (with dealer stamp and fully completed) should be presented to the dealer at the same time, and with original bill of purchase. If the owner has moved or the dealer is no longer available under the name of BERG Toys the name of the nearest BERG Toys dealer will be provided upon request.

7. If the warranty has not been presented, the owner will take care of all costs.

8. The warranty certificate is not transferable to other persons.

9.0 To be completed by you

In order to always have the data of your BERG go-kart at hand, please fill out data below. The serial number can be found on the silver sticker on the bottom of the frame of the go-kart.

Name dealer	:
Street	:
City	:
Phone	:
Name product	:
Serial number	:
Purchase date	:

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